

Nos. 18510 to 18519, 18521 to 18531, and 18533
IN THE

United States Court of Appeals
FOR THE NINTH CIRCUIT

UNITED STATES OF AMERICA,

Appellant,

vs.

JANICE WIENER, *et al.*; UNITED AIR LINES, INC.,

Appellees.

Appendix to Opening Brief of Appellant United
States of America.

FRANCIS C. WHELAN,
United States Attorney,

DONALD A. FAREED,
Assistant U. S. Attorney,
Chief of Civil Section,

DONALD J. MERRIMAN,
Assistant U. S. Attorney,

600 Federal Building,
Los Angeles 12, California,

*Attorneys for Defendant, Cross-Defendant,
and Appellant, United States of America.*

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Appendix A.

Consolidated Findings of Fact and Conclusions of Law.

Appendix B.

Excerpts from Title 10, U. S. C.

Appendix C.

AFR 55-19 (diagram omitted); AFR 55-19 Change.

Appendix D.

Wing Supplement 1 to AFR 55-19.

Appendix E.

Training and Operations Memorandum 51-8.

Appendix F.

Record references to pleadings showing jurisdiction (supplemental to the Appendix (Part II)) to United's Opening Brief.

PRELIMINARY STATEMENT.

In order to avoid duplication Parts I and VI of the Appendix to the Opening Brief of United Air Lines, Inc. is incorporated herein by reference. Part I includes Names and numbers of each case, and amounts of recovery by plaintiffs; computed amounts of contribution as between Government and United; cases by groups.

Numbers both here and below (the latter in parenthesis) and names of each case.

Part VI is the detailed record references to exhibits.

APPENDIX A.

Consolidated Findings of Fact and Conclusions of Law:

(1) in the Above Entitled Consolidated Actions as Between the Plaintiff and the United States of America wherein the United States of America is a Defendant; and (2) in the Above Entitled Actions as Between Defendants United States of America and the United Air Lines on the Cross-Claims of Each of Said Defendants Against the Other for Indemnity or Contribution.

The above entitled Court on March 29, 1960, having ordered the above entitled causes consolidated for trial as to liability only, with the question of damages to be tried separately in each case before separate juries; and an appeal having been allowed and taken from said order to the United States Court of Appeals for the Ninth Circuit, and the said order having been reversed and the case remanded with instructions; and the above entitled Court, pursuant to said instructions and the Stipulation of the parties on the 26th day of July, 1961, having made its Order for Consolidation of all cases for trial on the issues of both liability and damages, with the issue of damages in each case to be tried separately before the same jury after trial and verdict on the issue of liability; and the said trial on liability of defendants to plaintiffs having been consolidated for trial with the trial to the Court without a jury of cross-complaints of defendants against each other;

And the said consolidated causes having come on for trial on the said issue of liability and on said cross-claims before the above entitled Court, Pierson M. Hall, Judge Presiding, beginning February 6, 1962 and con-

tinuing through May 23, 1962, Belcher, Henzie & Fargo by Frank B. Belcher, Margolis and McTernan by Ben Margolis, Johnson & Ladenberger by Robert G. Johnson, Oliver, Good & Sloan by Richard L. Oliver and James A. Witners, appearing as counsel for all of the plaintiffs; and Chase, Rotchford, Downen & Drukker by Hugh Rotchford and James J. McCarthy appearing on behalf of defendant United Air Lines, Inc., and Francis C. Whelan, United States Attorney, Donald A. Fareed, Assistant United States Attorney, and Milan M. Dostal, Trial Attorney, appearing for the defendant United States of America;

And said consolidated cases having been tried with a jury as to the liability of defendant United Air Lines to plaintiffs and by the Court sitting with an advisory jury ordered by the Court as to the liability of defendant United States of America, and by the Court sitting without a jury, a jury trial having been waived, as to the cross-claims of defendants against each other, and special interrogatories having been submitted to the said advisory jury with respect to the said liability of defendant United States of America;

And the Court and jury having heard the testimony and having examined the proof offered by the respective parties and the jury having returned a verdict on liability in favor of plaintiffs and against the defendant United Air Lines, and the jury having answered each of the special interrogatories submitted to it and having rendered its advisory verdict thereon, and the Court having announced that it would find in accordance with the said answers to special interrogatories and the said advisory verdict of said advisory jury as to the liability of defendant United States of America;

And the Court being fully advised in the premises, does hereby make its Findings of Fact and Conclusions of Law on the issue of liability of defendant United States of America to plaintiffs and on the cross-claims of defendants against each other :

Findings of Fact

1. In each of the consolidated cases in which the action is brought by a personal representative, such personal representative was duly qualified and acting as such personal representative, and such action was brought for the benefit of the heirs of the decedent.

2. United Air Lines, Inc. (hereinafter referred to as United) is, and at all times here pertinent has been, a Corporation duly organized and existing under the laws of the State of Delaware and was and is doing business in the State of California and in the State of Nevada.

3. At all times here pertinent United Air Lines, Inc., was, and presently is, a common carrier of passengers, property and mail by air, engaged in interstate commerce and conducting business as a scheduled air carrier pursuant to certificates of public convenience and necessity duly issued by the Civil Aeronautics Board of the United States of America.

4. At the time of the accident each of the decedents named in the Complaints in the consolidated cases was a passenger for hire on the Douglas DC-7 airplane, Registration No. N-6328C, owned and operated by United Air Lines on its regularly scheduled Flight 736 from Los Angeles, California, to New York, New York, with intermediate scheduled stopping places at Denver, Colorado, Kansas City, Missouri, and Washington, D.C.

5. On and prior to April 21, 1958, Victor 8 airway was a major transcontinental airway used extensively by air traffic, including large passenger airliners like United's DC-7 and was the principal route between Los Angeles and Denver.

6. Victor 8 airway was established by the CAA (Civil Aeronautics Administration) on June 1, 1952, and includes the navigable airspace above all the area on the surface of the earth lying within five statute miles of each side of the center line as prescribed for Victor 8 airway up to an elevation of 27,000 feet mean sea level. Victor 8 airway extends from Long Beach, California, to Washington, D.C., and passes over Ontario and Daggett, California, and Las Vegas and Mormon Mesa, Nevada. On April 21, 1958, Nellis AFB was located on the northeastern edge of Las Vegas, Nevada, within the lateral confines of Victor 8.

7. It was common knowledge that Victor 8 was a regular route for two-way traffic at the time of the accident.

8. En route through commercial airline passenger traffic on Victor 8 in the vicinity of Las Vegas, Nevada, such as United's DC-7's, would normally fly between the altitudes of 18,000 feet and 25,000 feet and would never fly below 9,500 feet, which was the minimum IFR en route altitude established by the CAA for this area.

9. The weather conditions at Las Vegas on April 21, 1958, as reported by the U. S. Weather Bureau, were as follows: "Skies were clear at Las Vegas, Nevada, at 08:00 P.S.T. and at 09:00 P.S.T. with visibility 35 miles. The surface wind at both times was

from the North 17 knots. There were no pilot reports received from the area." All references in these findings to time of day are to Pacific Standard Time on the morning of April 21, 1958.

10. The flight crew of United's Flight 736 consisted of Capt. Duane M. Ward; First Officer Arlin E. Sommers; Flight Engineer Charles E. Woods. Capt. Ward had piloted passenger flights for United since 1940, two years as a First Officer, three years as a Reserve Captain, and thirteen years as a Captain and had accumulated more than 16,000 hours of scheduled flight time since that date. First Officer Sommers had been serving as First Officer on passenger flights for United since March 21, 1951 and had accumulated approximately 9,000 hours of scheduled flight time since that date. Flight Engineer Woods had been employed by United since 1942 and had accumulated approximately 7,300 hours of scheduled flight time as a Flight Engineer.

11. United's Flight 736 was a regularly scheduled flight and was listed as such on United's timetable. This timetable was available at Nellis Air Force Base prior to and on April 21, 1958.

12. United's Flight 736 was scheduled to depart Los Angeles International Airport at 07:30 P.S.T. Prior to takeoff of said Flight 736 on April 21, 1958, United filed with the CAA (Civil Aeronautics Administration) ARTC (Air Route Traffic Control) Center at Los Angeles an IFR (Instrument Flight Rules) flight plan which proposed the use of Victor airway 16 to Ontario, California and Victory airway 8 to Denver. The flight plan also proposed a cruising altitude of 21,000 feet mean sea level, a true air speed of 305

knots, and a departure time of 07:35 P.S.T. An entry on the flight plan indicated that United's pilot would accept a VFR (Visual Flight Rules) climb to cruising altitude. Flight 736 was off the ground at Los Angeles at 07:37 P.S.T. Prior to 07:40 P.S.T. the ARTC Center of the CAA at Los Angeles issued an IFR air traffic clearance to the flight to proceed to Denver in accordance with the proposed flight plan. This clearance was acknowledged by the flight and was logged by the said ARTC Center of the CAA at Los Angeles at 07:40 P.S.T. A copy of the flight plan was immediately forwarded by said Los Angeles ARTC teletype to the ARTC Center of the CAA at Salt Lake City. At 07:54 P.S.T. the flight reported by radio that it was over Ontario at 07:53 P.S.T. at 12,000 climbing in VFR conditions and estimating its arrival over Daggett at 08:11 P.S.T.

13. At or about 08:14 P.S.T., the CAA ARTC Center at Los Angeles and Salt Lake City received from ARINC (Aeronautical Radio, Inc.) which serves under contract to various Air Carriers, including United, as a Radio Communicating Facility, a report that United's DC-7 had radioed as follows:

“United 736 Daggett. One, one, two one thousand. Las Vegas three one Bryce Canyon.”

This report indicated that Flight 736 was over Daggett at eleven minutes past the hour (08:11 P.S.T.), flying at 21,000 feet altitude, estimating its arrival over Las Vegas VOR (a CAA radio navigational facility located on McCarren Field at Las Vegas, Nevada) at 31 minutes past the hour (08:31 P.S.T.), and that Bryce Canyon would be the next reporting point after Las Vegas.

14. On April 21, 1958, defendant United States owned, and through its agents and employees in the United States Air Force was operating an F-100F Super Sabre Jet fighter airplane No. 56-3755A, from Nellis Air Force Base, in the vicinity of Las Vegas, Nevada, on a training flight. The F-100F carried Capt. Tom N. Coryell, a rated pilot, as instructor and observer pilot in the front seat and First Lieut. Jerald D. Moran as instructee pilot in the rear seat.

15. On the morning of April 21, 1958, prior to takeoff, the pilots of the Government's F-100F aircraft received an authorization from their squadron operations officer for a local flight under VFR conditions.

16. On April 21, 1958, the Government's F-100F had two pilots aboard. Pilot Lt. Moran was learning to operate this airplane by instruments only in the rear seat and at all pertinent times during the flight was under a hood and was unable to see outside of the cockpit in which he was seated. It was his first such instrument penetration or let down procedure in an F-100 type aircraft. Lt. Moran had previously flown and practiced teardrop let down procedures in T-33 jet aircraft. An experienced instructor pilot, Capt. Coryell, who had never been on an instrument mission with Lt. Moran before, occupied the front seat and had two-way microphone communication available at all times with Lt. Moran. It was the instructor's duty to instruct the pilot in the rear seat, to monitor each step of his performance, to monitor the engine, navigation and other instruments of the plane, and to maintain a visual lookout for other aircraft. It was also the instructor pilot's duty to take careful note of the extent of each of the student's deviation from the pre-

scribed procedure, if any, so that he could take over the controls when such deviations reached dangerous proportions, and so that he could later brief the student. The F-100F had dual pilot controls and the instructor could take over the operation and control of the airplane at any time.

17. This training flight took off at approximately 07:45 P.S.T. Lt. Moran was to receive training in primary instrument maneuvers during the first portion of the training period which was to be conducted in the transition area, an area lying off Victor 8 and designated for and used to teach basic instrument flying. Subsequently, just prior to finishing the mission and on his way back to Nellis Air Force Base, Lt. Moran was to engage in a practice teardrop instrument penetration, without obtaining from CAA an IFR traffic clearance or traffic information therefor, involving a descent and approach to Nellis under simulated instrument flying conditions. This penetration was supposed to be executed in conformity with a procedure, known as the KRAM procedure, formulated and prescribed by agents of the Government. This KRAM procedure, involving a descent in a teardrop pattern, was designed by the Nellis Command, using as a "fix" for initiating and concluding the penetration a commercial broadcast radio station (KRAM) located on the easterly edge of the City of Las Vegas within the lateral boundaries of Civil Airway Victor 8. The KRAM procedure prescribed in the pertinent part, that Nellis jets on approaching KRAM get a clearance for the KRAM penetration from Nellis VFR control, cross KRAM at 20,000 feet or above, descend on a magnetic track of 170 degrees at 300 knots indicated airspeed

(approximately the equivalent of 430 knots or 495 m.p.h. true or actual airspeed under the atmospheric conditions prevailing on the morning of April 21, 1958, at the altitude of 21,000 feet), and make a right penetration turn at 11,000 feet within 16 nautical miles of KRAM; the prescribed rate of turn was $1\frac{1}{2}$ degrees per second and the bank was 30 degrees; during the descent it was prescribed that the speed brakes be extended. The term "teardrop" derives its name from the fact that the path of the plane executing said KRAM procedure, if drawn on the earth, would resemble the shape of a teardrop.

18. On April 21, 1958, while engaging in an Air Force training flight, which, among other things included the said KRAM practice instrument penetration involving a descent and approach to Nellis Air Force Base under simulated instrument flying conditions, at about 08:30 P.S.T. near Las Vegas, Nevada, the Government jet airplane was involved in a collision with United's DC-7 airplane, which was then proceeding in the vicinity of Las Vegas, Nevada, along Victor 8 airway en route from Los Angeles, California to Denver, Colorado, under the IFR air traffic clearance issued to it by the CAA. The collision caused the crash and total destruction of both airplanes and the property thereon and the death of all persons on both airplanes (forty-seven persons on the DC-7 and two persons in the F-100F jet), including all of the decedents named in the complaints in the consolidated actions. The location of the debris or components of the planes which were thereafter found is indicated on charts stipulated by the parties (Exhibits G-25, 26 and 27).

19. KRAM is a commercial radio broadcasting station located within the lateral confines of Victor 8, on the easterly edge of the City of Las Vegas and was one of the facilities used by the United States Air Force for jet instrument letdown procedures into Nellis AFB. The pattern on which the KRAM procedure was based is described and depicted in Exhibit U-3 and generally described in Finding No. 17.

20. Defendant Government's F-100F was executing, or attempting to execute, a practice KRAM procedure at the time of this collision.

21. Nellis VFR Control is the name given to a radio facility located on Nellis AFB and established, maintained and used, as a training aid by Nellis Command. It was in one of the rooms in a one-story building which was not physically located in conjunction with the Nellis Tower. It afforded VFR control-personnel no opportunity for visual observation of airplanes.

22. Nellis VFR Control was designed to and did, on April 21, 1958, clear Nellis aircraft for practice range orientation, assign approach and holding altitudes, establish time separation between flights, and issue clearance for radio range, Automatic Direction Finder or Direction Finder penetration, for hooded flights during VFR conditions, including those using the KRAM procedure, such as was being performed at the time of the crash in question.

By so doing, it was designed to and did provide actual separation between Nellis jet planes practicing those procedures, including the KRAM procedure, but not between such Nellis jet planes and any other user of the air space.

23. Nellis VFR Control had a direct telephone line to Nellis Tower; Nellis Tower was connected with the CAA facilities at McCarran Field (including Las Vegas Approach Control, located at McCarran Field) and the ARTC Centers at Salt Lake City, Utah, and Los Angeles, California; all such connections were by direct Government telephone circuits.

24. Two-way communication between the Government's F-100F and Nellis Tower and between the Government's F-100F and Las Vegas Approach Control was available at all times during the flight of the Government's F-100F on April 21, 1958, and the pilots of the F-100F knew how to contact Las Vegas Approach Control and Nellis Tower.

25. At the time of this accident, Nellis Tower personnel could have obtained information on IFR traffic, including United's Flight 736, by calling the Salt Lake ARTC Center directly or by calling Las Vegas Approach Control and asking them to get and pass on this information. Nellis had a direct open telephone line to both said facilities.

26. Neither Nellis Command (the Commander and his subordinates) nor the pilots of the F-100F secured or attempted to secure any IFR clearance for the F-100F from the CAA for its flight on April 21, 1958, nor did they, or any of them, secure or attempt to secure any air traffic information on said date. In the exercise of ordinary care such IFR clearance or traffic information could and should have been secured or attempted to have been secured by the Nellis Command or said F-100F pilots on April 21, 1958, prior to the collision.

27. Available radio facilities could and should in the exercise of ordinary care have been utilized by the

pilots of the F-100F to request an IFR clearance. If such request had been made, it would have been processed and clearance for an immediate KRAM procedure would have been denied with instructions to either use an alternate penetration procedure or to engage in a holding procedure until United's Flight 736 had passed the area in question, at which time the IFR clearance would have been granted.

28. Nellis Command made no inquiries of the CAA or any other source on or prior to April 21, 1958, to determine the times and altitudes at which airline traffic using Victor 8 would be in the vicinity of Las Vegas, Nevada, or concerning the volume and flow of traffic on that airway which inquiries were required in the exercise of ordinary care.

29. The pilots of the Government's F-100F neither requested nor were supplied with traffic information concerning en route traffic on Victor 8 April 21, 1958, either prior to their take-off or during their flight, nor did anyone else request such information in their behalf.

30. Because of the hazard of collisions between F-100Fs flying the said KRAM procedure and commercial passenger planes the exercise of ordinary care required the obtaining of such traffic information or IFR clearances by pilots of the F-100Fs practicing said KRAM procedure.

31. At approximately 08:23 P.S.T. the Air Force F-100F called Nellis VFR Control and reported it was inbound to KRAM.

32. The Air Force F-100F while in flight requested from Nellis VFR Control an altitude assignment from which it would conduct a simulated ADF instrument jet let down utilizing the radio signal emanating from

radio station KRAM. The VFR Controller assigned the aircraft the altitude of 28,000 feet and advised it to report over the radio station. At approximately 08:27 the flight reported that it was over KRAM and requested a penetration clearance. The VFR Controller cleared the Air Force F-100F for immediate penetration and requested that it report the penetration turn. The Air Force F-100F at 08:29 reported departing 28,000 feet. There were no other reports from the flight in connection with this procedure prior to the collision.

33. The F-100F approached KRAM from a generally easterly direction.

The pilots of the F-100F flew and operated said F-100F in such fashion that said plane, after passing over KRAM, never got on the path prescribed by the KRAM procedure; and said pilots so flew the plane that said plane, after passing in a generally westerly direction over KRAM, was at all times, except immediately prior to the collision, in air space which was to the northwesterly of the center line of V-8 and so that the collision occurred at approximately 21,000 feet above the point marked H-1 on Exhibit U-39 which point was 1 to 1½ miles southeasterly of the center line of V-8 and approximately 16 miles southwest of KRAM radio tower.

34. The F-100F's heading at the time of impact was between 146 degrees magnetic and 157 degrees magnetic.

35. The true air speed of the F-100F as it approached the DC-7 and at the time of impact was 495 miles per hour or more. The true air speed of the DC-7 as it approached the F-100F and at the time of impact was approximately 350 miles per hour.

36. The Government's F-100F plane was descending as it approached United's DC-7. At the time of impact its angle of descent was 17 degrees.

37. At the time of the impact the F-100F's speed brakes were retracted. In the exercise of ordinary care said brakes should have been extended.

38. As the two planes approached each other, their courses were converging.

39. At the time of the impact the relative bearing of the F-100F with respect to the DC-7 in a horizontal plane, measured counterclockwise from the nose of the DC-7, was approximately 33 degrees.

40. The flight path of the F-100F converged upon the flight path of the DC-7 from the left of the nose of the DC-7.

41. The F-100F approached from the left of the DC-7 and had the DC-7 on its right, but it negligently failed to yield the right-of-way to the DC-7. The conduct of the F-100F did not relieve the crew of the DC-7 from taking action to avoid the collision which the crew of the DC-7 negligently failed to do.

42. The DC-7's ground track, shortly prior to and up to the time of collision, was 31 degrees magnetic, but, in order to allow for the influence of the wind at that particular time and place, its actual heading was approximately 23 degrees magnetic.

43. At the time of the collision, United's Flight 736 was flying at an altitude of approximately 21,000 feet, and within the confines of the civil airway known as Victor 8.

44. The flight crew of the DC-7 did not initiate any evasive maneuver prior to the collision which could

and should have been done in the exercise of ordinary care.

45. As reported by ARINC, beginning at approximately 08:30, plus twenty seconds, P.S.T., on April 21, 1958, United's Flight 736 made a radio call in substance as follows:

"United 736, Mayday, mid-air collision, over Las Vegas."

46. Neither McCarran Tower nor Las Vegas Approach Control Nellis Tower had any communication with the F-100F after take-off and before the accident nor did they have any knowledge of its whereabouts. Nellis VFR Control knew the approximate location of the F-100F at the time the F-100F reported above KRAM at 28,000 feet and that the F-100F was then cleared for a practice instrument letdown procedure by Nellis VFR Control.

47. The said KRAM procedure was hazardous in many respects including the following:

47a. The area in which said procedure was designed to be conducted was one with a very high density of both military and civilian air traffic; approximately 85% of the procedure as designed took place over and upon Victor 8 airway, the most heavily traveled airway in the Las Vegas-Nellis area, and jets practicing this procedure, as the F-100F was in this instance doing, would be on this airway at substantially all of the altitudes between 25,000 and 9,500 feet.

47b. The said KRAM procedure required a high speed during a rapid rate of descent from altitudes of 20,000 feet and above to 6,000 feet altitude and the various maneuvers necessary to ac-

comply with the teardrop type of penetration on and over said airway.

47c. The said KRAM procedure required students being trained to fly the F-100F to practice instrument flying of said KRAM procedure while under a hood which did not permit the student pilot to see outside the cockpit in which he was seated.

47d. Total reliance during said procedure was placed upon an instructor-pilot to scan for other planes and to advise the student pilot to take, or to himself take, the action necessary to avoid collision with other planes, during which time the instructor-pilot was required to perform many additional duties.

47e. The said KRAM procedure was conducted in an area and at altitudes in which en route commercial passenger planes regularly flew at high rates of speed thus creating a high rate of closure between military jets and commercial passenger planes if on a collision course.

47f. The consequences of a mid-air collision between an Air Force jet and a commercial passenger plane could and should have reasonably been anticipated to be the destruction of both planes and the death of all the passengers and crews on said planes.

47g. The momentary failure to exercise the required degree of care on the part of any pilot flying in the area or engaging in the KRAM procedure could result in a mid-air collision and was reasonably foreseeable.

48. All of the facts set forth in the last-numbered Finding, including all of the subdivisions thereof, were known, or in the exercise of ordinary care could and should have been known, to the Commander of Nellis AFB and those of his subordinates who participated in the establishment and continued use of the said KRAM procedure. (The aforesaid Commander and subordinates are sometimes referred to as the Nellis Command.)

49. The Nellis Command was required by Air Force regulations in establishing and scheduling local VFR flight operations, including said KRAM procedure, to minimize congestion and potential air collision hazards; the said Nellis Command in the exercise of ordinary care could and should have established the KRAM procedure so as to avoid Victor 8 airway at the altitudes regularly used thereon by en route commercial passenger planes.

50. In the establishment and maintenance of the said KRAM procedure the Nellis Command was required to make, and could and should in the exercise of ordinary care have made, a study of commercial passenger traffic in the area involved and could and should have in the exercise of ordinary care, designed and utilized said KRAM procedure in the light of the results of such study; no one at Nellis was assigned to or exercised the responsibility of making such a study or of designing or utilizing the KRAM procedure in the light of facts obtainable from such a study.

51. The Nellis Command failed and neglected to coordinate said KRAM procedure with defendant United or with other commercial airline carriers utilizing Victor 8 airway which was required in the exercise of ordinary care.

52. If the pilots of the F-100F had been adequately informed and warned of the hazards of collision with regularly scheduled commercial passenger planes and instructed to exercise extreme caution in connection therewith while on Victor 8 airway, it would have tended to increase such pilot's vigilance and to decrease the likelihood of the collision which occurred. The Nellis Command failed and neglected to provide such adequate information, warning and instructions which was required in the exercise of ordinary care.

53. The decision to design and use the KRAM jet penetration procedure as it existed on April 21, 1958, for use in simulated IFR jet penetrations was made by the Nellis Command.

54. Jet aircraft at Nellis AFB regularly executed the KRAM procedure in VFR conditions without obtaining IFR clearance or traffic information from the CAA.

55. The Nellis Command could and should have established in the exercise of ordinary care, a procedure requiring all pilots practicing the KRAM procedure to obtain either traffic information or IFR clearances; the said Nellis Command negligently and carelessly failed and neglected to provide for or to establish any procedure requiring pilots flying the KRAM procedure to obtain such traffic information or IFR clearances.

56. The Nellis Command negligently and carelessly failed and neglected prior to April 21, 1958, to give notice to defendant United or to any commercial passenger airlines of the KRAM simulated jet penetration procedure being conducted by the Air Force in the Las Vegas-Nellis area, which neglect and failure included but was not limited to the failure to use any of the

following means of communication to give such notice and information:

a. The issuance of an appropriate NOTAM (Notice to Airmen issued and published in the *Airmen's Guide* bi-weekly) by the CAA of the area in which the KRAM procedure was being conducted and advising planes entering the area to use extreme caution;

b. The calling of a conference or meeting with officials of commercial passenger airlines responsible for safety in flight and advising such officials including such officials of United that facts and problems relating to safety in flight over and in the vicinity of Nellis AFB would be discussed at such conference or meeting;

c. The publication and distribution to commercial passenger airlines including United officials responsible for safety matters of some form of written communication specifically and in detail describing the said KRAM procedure and setting forth all available information concerning the times and methods of its use.

57. The officials of the CAA had knowledge of the utilization of the said KRAM procedure and knew or in the exercise of ordinary and reasonable care should have known of the hazards to commercial passenger carriers involved therein; said officials issued an IFR clearance to United Flight 736 on April 21, 1958 to fly on Victor 8 through the Las Vegas-Nellis area and negligently and carelessly failed to notify defendant United of the existence and utilization of said KRAM procedure.

58. On the morning of April 21, 1958, prior to the collision, the CAA did not know specifically of the

time or fact of take-off, the activities or the specific location of defendant Government's F-100F aircraft involved in the collision but had knowledge of the KRAM procedure.

59. When the CAA ARTC Center at Los Angeles granted an IFR air traffic clearance to defendant United's Flight 736 to fly Victor 8 over Las Vegas, Nevada, the CAA facility at McCarran Field, Las Vegas, Nevada, was aware, as hereinabove set forth, that jet aircraft from Nellis Air Force Base practiced penetrations through Victor 8 in VFR conditions without obtaining IFR clearance and without requesting information from the CAA with respect to IFR traffic in the Las Vegas area. The CAA had no knowledge of the flight of the Air Force F-100F involved in this accident, which aircraft was flying under visual air flight rules. It was the practice of the CAA to issue IFR air traffic clearance for flights along, across, or through airways when requested by either a civilian or military pilot, provided there was no conflicting IFR traffic.

60. On April 21, 1958 there were at least two IFR jet penetration procedures, the McCarran Field-VOR and the Indian Springs Air Force Base-Low Frequency Range Combined Approach procedure available for the practice of Nellis jet IFR penetrations, which were safer to commercial passenger airline traffic than the KRAM procedure, in that they call for substantially less descent to be made within the confines of Victor 8, and also kept the practicing planes off Victor 8 at those altitudes where one would normally expect to find en route commercial passenger airline traffic.

61. Prior to April 21, 1958, a teardrop penetration suitable for the training of students in IFR penetra-

tions could and should in the exercise of ordinary care have been designed by Nellis Command utilizing KRAM which would have required substantially less of the penetration to be on Victor 8, and which would have kept planes practicing this procedure off Victor 8 between the altitudes of 25,000 feet and 9,500 feet.

62. The KRAM procedure as required to be executed does not call for an acrobatic maneuver.

63. The instructor-pilot of the F-100F had the sole responsibility to look out for and see other planes and to initiate whatever action was necessary to comply with the obligation of the pilots of the F-100F relating to the avoidance of a collision; in all other respects the instructor and student-pilots were jointly responsible for the operation of the F-100F, subject, however, to the primary responsibility in this regard of the instructor-pilot and his responsibility to give directions and orders to the student-pilot with respect to the operation of the plane; all of the Findings relating to the conduct of the "pilots of the F-100F" are intended to be and are subject to this Finding as to the responsibility of the said pilots and this Finding is hereby incorporated in and made a part of each of the Findings relating to the conduct of the pilots of the F-100F.

64. No determination had been made on or prior to April 21, 1958 by the appropriate military authorities pursuant to the provisions of Civil Air Regulation 60.1 (14 C.F.R. §60.1) that non-compliance with the air traffic rules (CAR Part 60) by Nellis jets practicing simulated IFR penetrations was necessary or desirable in the interest of furthering a governmental objective.

65. The defendant United States was guilty of negligence in the manner in which the pilots of the F-100F

operated and controlled the plane while in the air on April 21, 1958.

66. The defendant United States of America was guilty of negligence in the failure of the pilots of the F-100F to obtain either traffic information or an IFR clearance.

67. The defendant United States was guilty of negligence in the establishment and continued use of the KRAM simulated jet penetration procedure under VFR conditions which was in effect at the time of the mid-air collision.

68. The defendant United States was guilty of negligence in failing to give defendant United Air Lines adequate or proper notice of the flying activities including the KRAM simulated jet penetration procedure being conducted by the Air Force in the Las Vegas-Nellis area.

69. The defendant United States was guilty of negligence in the general use of the KRAM simulated jet penetration procedure without obtaining traffic information or IFR clearance.

70. It was not the practice for the CAA Tower at McCarran Field, Las Vegas, Nevada, to have any information concerning en route IFR traffic, except that if a specific request from a pilot or anyone for en route IFR traffic information was received by McCarran Tower, McCarran Tower would transmit such request to Salt Lake City ARTC Center, requesting such information which, if received by McCarran Tower, would then be relayed to the person who made the original request.

71. The volume of highspeed Military jet traffic in the vicinity of Nellis Air Force Base, which encroached

upon Victor 8 during the day time hours Monday through Friday at the time of the accident and for a period of at least six years preceding the accident, was heavy and continuous. At the time of the accident during said day time hours there was an arrival or departure to and from Nellis approximately every 45 seconds, with a large part of the climb-out and approach of each such arrival or departure taking place on Victor 8.

Approximately 200 to 250 sorties of F-100s (one sortie includes both a take-off and a landing) a day were being conducted by Nellis planes at and out of Nellis. In addition, there were other sorties flown by Nellis T-33s and C-47s and approximately 35 Military transient planes a day, landing and departing Nellis.

At any given time during each of said days, there were approximately 50 to 60 jet aircraft from Nellis in the air. Nellis jet aircraft averaged a crossing per minute of Victor 8.

The number of practice instrument jet penetrations at Nellis using radio facilities in or near Las Vegas averaged between 20 to 60 per day. There was such a jet penetration on an average of one every 15 minutes. Of such jet penetrations, 10 to 20 per day used KRAM.

In addition to the crossings of the airways by Nellis planes, there were frequent crossings occurring regularly by jet Military planes from other airfields, including Luke, said planes sometimes flying in formation of four, with an many as five such formations, or 20 planes crossing the airways on a single mission.

In addition, Nellis planes and other Military planes engaged in low-frequency radio range orientation practice on the airway, in which student pilots flying blind

under the hood, with observer pilots, were seeking to orient themselves to the range facilities.

A major portion of the flying herein described took place at altitudes ordinarily used by en route commercial passenger planes.

The Nellis training area covered approximately 40,000 square miles which was bisected southwesterly to northwesterly by Victor 8. The training area was divided into areas for the conduct of the following training activities: Extended formation, close formation, transition, boom, acrobatic and flight test, Ground control intercept and instrument, flight test, air combat maneuvering, air-to-air gunnery, and air-to-ground gunnery, and air-to-ground bombing. (See Ex. G-45 and G-57.) The foregoing activities were conducted by Nellis for several years prior to April 21, 1958 and at times greatly exceeded the foregoing in volume. Such activities constituted and created conditions which were hazardous and dangerous to the conduct of commercial flying as carried on by United Air Lines by its flight 736 on April 21, 1958.

72. Prior to April 21, 1958, all of the flying conditions set forth in Finding No. 71, above, could and should have been known to United in the exercise of ordinary care. United had notice and actual knowledge of the general flying conditions and the hazards prevailing in the area, and in the exercise of ordinary care could and should have had knowledge of the details of said flying activities on and across Victor 8 airway in the Las Vegas area, including knowledge of the KRAM jet penetration procedure herein elsewhere described.

In the light of the knowledge actually possessed by United, its continued flying activities in the area with-

out taking the other precautions and doing the other things set forth in these Findings, and without making the inquiries necessary to obtain knowledge of said KRAM procedure, all to be done by United Air Lines in the exercise of ordinary care, was not passive, but rather was active negligence on its part.

73. The crews of the F-100F and the DC-7 each had the obligation to so operate their respective planes as to see and avoid each other; the crews, in the exercise of ordinary care, could and should have seen and taken the action necessary to avoid the collision; each crew negligently and carelessly failed to see and to take the action necessary for the avoidance of said collision.

74. United was not, in fact, aware that Nellis personnel were practicing the KRAM procedure on or prior to April 21, 1958.

75. United Air Lines failed to set up an adequate method of communicating known information and facts throughout United's operations organizations.

76. United actively planned, scheduled and operated its aircraft to the point of collision without exercising a reasonable degree of ordinary care required of it under the circumstances in failing to instruct or train its crews on the subject of systematically scanning for other aircraft and in leaving the manner in which scanning was handled to each individual flight captain.

77. United actively planned, scheduled and operated its aircraft to the point of collision without exercising a reasonable degree of ordinary care required of it under the circumstances in failing to adequately inform and instruct its crews relating to the dangerous operation of its aircraft through the Las Vegas area.

78. The crew members of both airplanes were in good health.

79. There was no mechanical malfunction of either aircraft prior to the collision.

80. Each of the acts and omissions set forth in these Findings of each officer and employee of each defendant was committed or done in the course and scope of his respective employment.

81. Each of the negligent acts and omissions on the part of defendant United States of America set forth in these Findings falls within the ambit of the Federal Tort Claims Act as amended and outside of the "discretionary function" exception as set forth therein.

82. Each of the negligent acts and omissions by each defendant as set forth in these Findings was a concurrent and proximate cause of the mid-air collision and of the resulting deaths of plaintiffs' decedents.

83. The accident in question was proximately caused by the failure to exercise the ordinary care under the circumstances which each defendant owed to the other.

84. The acts and omissions individually and collectively of United, as set forth in these Findings of Fact, constituted active and not passive negligence on the part of United Air Lines.

85. The acts and omissions individually and collectively of the United States, as set forth in these Findings of Fact, constituted active and not passive negligence on the part of the United States.

86. None of the acts of negligence as set forth above committed by United Air Lines and the United States of America was a wilful, wanton or intentional act of negligence.

87. Any Conclusions of Law set forth in the foregoing Findings of Fact shall be deemed incorporated in the Conclusions of Law.

Conclusions of Law

I.

This Court has jurisdiction in the above-entitled cases of the plaintiffs against defendant United States of America under 28 U.S.C. 1331(a) and 1346(b).

II.

The Federal Tort Claims Act as amended and the Nevada Wrongful Death Statutes as they existed on April 21, 1958, are applicable to the above-entitled consolidated actions and each of them.

III.

Under and by virtue of the said Tort Claims Act and Wrongful Death Statutes the defendant United States of America had a duty toward plaintiffs' decedents to exercise ordinary care to avoid the collision which resulted in their deaths.

IV.

The defendant United States of America by virtue of the acts and omissions of its employees acting within the scope and course of their employment negligently and carelessly failed to exercise such ordinary care.

V.

The negligent and careless acts and omissions on the part of the defendant United States of America were a proximate cause of the deaths of plaintiffs' decedents.

VI.

The negligent acts and omissions, and each of them, fell within the ambit of the Federal Tort Claims Act

and were outside of the "discretionary function" exceptions set forth in 28 U.S.C. 2680(a).

VII.

The plaintiffs are entitled to judgment against the defendant United States of America for such damages for the wrongful deaths of plaintiffs' decedents as shall be set forth in separate Findings of Fact and Conclusions of Law on the question of damages in each case.

VIII.

The Federal Tort Claims Act and the law of the State of Nevada as they existed on April 21, 1958, are applicable to the cross-claims of the defendant United Air Lines and the defendant United States of America against each other.

IX.

Jurisdiction of said cross-claims exists under 28 U.S.C. 1331(a), 1345, 1346(b) and F.R.C.P. 13(g).

X.

The United States of America and the United Air Lines owed to each other the duty to exercise ordinary care to avoid the collision which resulted in the deaths of plaintiffs' decedents. Each defendant negligently and carelessly failed to exercise such ordinary care.

XI.

Such negligent and careless acts and omissions of each of the defendants, United States of America and United Air Lines, proximately and concurrently caused the collision which resulted in the deaths of plaintiffs' decedents. Each defendant was in *pari delicto*.

XII.

Neither the United Air Lines nor the United States of America was a wilful, wanton or intentional tortfeasor.

XIII.

The acts and omissions individually and collectively of the defendant United Air Lines, as set forth in the Findings of Fact, constituted active and not passive negligence on the part of United Air Lines.

XIV.

The acts and omissions individually and collectively of the defendant United States of America, as set forth in the Findings of Fact, constituted active and not passive negligence on the part of the United States of America.

XV.

The liability of the defendants United Air Lines and the United States of America to each of the plaintiffs in these actions is joint and several.

XVI.

Neither of the defendants United States of America nor United Air Lines is entitled to indemnity from the other.

XVII.

On the cross-claims of the United States of America and United Air Lines against each other, each is entitled to contribution from the other for one-half of the sums, if any, which such defendant shall pay to each plaintiff in these actions, except that in the cases wherein such one-half exceeds the amount of the judgment or verdict in favor of a plaintiff against a particular defendant, the court will hereafter in such case or cases fix and determine the amount or percentage to be contributed from one defendant to the other.

XVIII.

There is no effect on any issues raised by the cross-claims of the United States of America and the United Air Lines against each other in these cases by any proceedings in the action of *United Air Lines, Inc. v. United States of America*, Civil No. 2043, District of Delaware, or actions in any other jurisdiction arising out of the same collision.

XIX.

Any Finding of Fact stated in these Conclusions of Law is hereby adopted as a Finding of Fact.

Order

Pursuant to the stipulation of the parties,
It Is Hereby Ordered:

(1) That separate Findings of Fact and Conclusions of Law on damages, which will incorporate these Findings of Fact and Conclusions of Law as to liability, and judgments for the plaintiffs will be made and entered against the United States of America in each case where it is a defendant, with a judgment on the jury verdict returned against United Air Lines in each case where it is a defendant;

(2) That separate judgments, which will incorporate these Findings of Fact and Conclusions of Law (except as to Conclusions of Law No. XVII where a different conclusion is reached with respect thereto), will be made and entered in each case on the respective cross-claims, made in each case, by each defendant, United States of America and United Air Lines, against the other.

Dated nunc pro tunc May 24, 1962.

/s/ PEIRSON M. HALL,
Judge

APPENDIX B.

Title 10

United States Code

Armed Forces

* * * * *

Subtitle D—Air Force

Chapter 803. Department of the Air Force

§ 8012. Secretary of the Air Force: powers and duties; delegation by; compensation.

(a) There is a Secretary of the Air Force appointed from civilian life by the President, by and with the advice and consent of the Senate. The Secretary is the head of the Department of the Air Force.

(b) The Secretary is responsible for and has the authority necessary to conduct all affairs of the Department of the Air Force, including—

(1) functions necessary or appropriate for the training, operations, administration, logistical support and maintenance, welfare, preparedness, and effectiveness of the Air Force, including research and development;

§ 8062. Policy; composition; aircraft authorization.

(a) It is the intent of Congress to provide an Air Force that is capable, in conjunction with the other armed forces, of—

(1) preserving the peace and security, and providing for the defense of the United States, the Territories, Commonwealths, and possessions, and any areas occupied by the United States;

- (2) supporting the national policies;
- (3) implementing the national objectives; and
- (4) overcoming any nations responsible for aggressive acts that imperil the peace and security of the United States.

(b) There is a United States Air Force within the Department of the Air Force.

(c) In general, the Air Force includes aviation forces both combat and service not otherwise assigned. It shall be organized, trained, and equipped primarily for prompt and sustained offensive and defensive air operations. It is responsible for the preparation of the air forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated joint mobilization plans, for the expansion of the peacetime components of the Air Force to meet the needs of war.

(d) The Air Force consists of—

(1) the Regular Air Force, the Air National Guard of the United States, the Air National Guard while in the service of the United States, and the Air Force Reserve;

(2) all persons appointed or enlisted in, or conscripted into, the Air Force without component; and

(3) all Air Force units and other Air Force organizations, with their installations and supporting and auxiliary combat, training, administrative, and logistic elements; and all members of the Air Force, including those not assigned to units; necessary to form the basis for a complete and immediate mobilization for the national defense in the event of a national emergency.

APPENDIX C.

*AFR 55-19

1-4

Air Force Regulation No. 55-19

Department of the Air Force, Washington, 13 July
1956

Operations

Control of Local Air Force VFR Air Traffic

Purpose: Safe and efficient local Air Force flight operations today depend, in part, upon the manner in which local aircraft is supervised and controlled. This regulation provides guidance for commanders, pilots, and air traffic control personnel for insuring maximum safety and efficiency in their local flying operations.

1. Establishing and Defining Local Flying Areas. The commander having jurisdiction over local flying activities will:

a. Establish local flying area(s) within 100 miles of his base. He will locate the area(s), insofar as practicable, outside populous areas, control areas, and control zones to use the least congested airspace within the 100-mile limit. (When required, the commander of a major air command may authorize the extension of a local flying area beyond the 100-mile limit.)

b. Define each local flying area by indicating prominent landmarks and/or radio fixes. When necessary, he will issue appropriate NOTAMS announcing that extensive training is being conducted within given vertical limits and that pilots entering the area(s) must use extreme caution.

*This regulation supersedes AFR 55-19, 23 February 1950.

2. Operational Control and Supervision. The commander having jurisdiction over local flight operations will:

a. Segregate the various types of local VFR flying activities, such as instrument training, acrobatics, and maintenance test, by designating discrete areas for each type of activity.

b. Schedule local VFR flight operations in a manner which will minimize congestion and potential air collision hazards.

c. Assign specific altitudes that will provide at least 1000 feet vertical separation to aircraft operating in a designated instrument training area.

3. Control of Air Traffic Near Airfields. The commander, the pilot, and air traffic control personnel are responsible as follows:

a. The *commander* will establish procedures to provide controllers with adequate position reports (relative to geographical and/or radio fixes) prior to entry of aircraft into the control zone or traffic pattern. To minimize conflict with traffic on civil airways, at nearby airfields, and in local flying areas, VFR arrival and departure routes may be established. At joint bases, the establishment of such procedures and routes will be coordinated with other appropriate agencies.

b. The *pilot* approaching for landing will normally make initial contact with the appropriate air traffic control agency at least 5 minutes flying time from the airport and give his position. In all cases, he will make contact prior to:

- (1) Entering the control zone, or
- (2) Entering the traffic pattern, if he is on a local flight within the control zone. He will operate

App. C-p. 3

his aircraft at reduced power and speed consistent with safe operation. *The pilot is responsible for avoiding collision with other aircraft during VFR weather conditions.*

c. Both the *pilot* and *air traffic control personnel* will restrict radio transmissions to a minimum, consistent with safe operations. *Radio discipline will be rigidly enforced.*

4. Use of Traffic Patterns:

a. The *commander of a major air command* will establish two traffic patterns—the overhead and the rectangular—for bases under his control. (These patterns will be established in accordance with the attached diagram.) He may specify that his pilots fly either or both traffic patterns. He may, however, authorize deviations from the traffic patterns when the mission or local conditions dictate.

b. The *pilot performing an overhead approach* will fly initial approach, crosswind and downwind legs, at 500 feet above the rectangular traffic pattern altitude. He will commence descent when turning onto the base leg. Normally, his overhead approach will conform to an elliptical shaped pattern. It will consist of a 3-to-5 mile initial approach followed by two 180° left turns and a roll-out on the final approach at a distance of not less than one-quarter of a mile from the end of the runway and 300 feet above the ground.

c. The *pilot performing a rectangular approach* will conform to the rectangular traffic pattern shown in the attached diagram.

d. *Air traffic control personnel* and the *pilot* are authorized to make maximum use of controlled straight-in approaches.

e. The *pilot landing at bases outside his command* will fly the traffic pattern specified by his own command. He will, during the initial radio contact for landing instructions, state the type of traffic pattern he intends to fly.

5. Control of Simulated Instrument Flight Rule (IFR) Approaches. The commander, the pilot, and air traffic control personnel are responsible as follows:

a. The *commander* will direct maximum use of outlying facilities in order to relieve air traffic congestion near local navigational facilities.

b. The *pilot*, prior to conducting simulated IFR approaches, will inform the control tower of his intentions and obtain a clearance. He will monitor the appropriate control frequency throughout and inform the control tower of discontinuance of this activity. At those locations without a control tower, but where there is a communications station, he will contact this facility, state his intentions, request traffic information, and monitor an appropriate frequency. He will inform the communications facility of discontinuance of his activity.

c. *Air Force Air Traffic Control Personnel who are authorized* to provide IFR control service will, in addition to application of VFR procedure and, insofar as practicable, furnish pilots practicing instrument approaches with IFR separation from other known traffic. Pilots provided with this service will be advised to maintain VFR flight. Altitude priority will be given to IFR flights. IFR traffic will not be delayed because of VFR traffic simulating IFR flight. When necessary, such VFR traffic may be suspended.

d. *Air Force Air Traffic Control Personnel who are not authorized* to provide IFR control service will furnish traffic information to those pilots practicing instrument approaches and advise them to maintain VFR flight.

6. Issuing Local Directives:

a. The *commander of each Air Force base* will publish local directives to carry out the provision of this regulation. He will develop these directives in coordination with the local air traffic control agency (AACS, CAA, or other), adjacent military installation commanders, airport operators, and other interested agencies.

b. The *commander of each Air Force flying unit stationed on other than an Air Force base in a tenant status* will cooperate and collaborate with the airport operator, associated control agency, and other interested agencies in developing appropriate operational agreements concerning control of local VFR operations.

7. Disseminating Flight Information. The commander, air traffic control personnel, and base operations personnel are responsible as follows:

a. The *commander issuing directives or agreements* under the provisions of this regulation will furnish copies to adjacent military installation commanders, airport operators, associated control agencies, and other interested agencies. He will furnish information describing any special VFR arrival and departure routes established under paragraph 3a, to the Aeronautical Chart and Information Center for inclusion in the Remarks column, Directory of Aerodromes section, Radio Facility Charts.

b. The *commander responsible for administering annual instrument written examinations* for the Instrument Certificate (AF Form 8, white, and AF Form 8a, green) will direct the attention of each pilot to the provisions of this regulation at the time of examination.

c. *Air traffic control personnel* will furnish pilots with traffic advisories and other information on local conditions, which will assist them in avoiding collisions during VFR weather conditions.

d. *Base operations personnel* will inform transient pilots of special departure procedures when flight plans are filed.

By Order of the Secretary of the Air Force:

N. F. TWINING

Chief of Staff, United States Air Force

Official:

E. E. TORO

Colonel, USAF

Air Adjutant General

1 Attachment:

Standard Traffic Pattern Chart

DISTRIBUTION:

S

*AFR 55-19A

2-3

CHANGE

Air Force Regulation No. 55-19

Department of the Air Force, Washington, 7 October 1957

Operations

Control of Local Air Force VFR Air Traffic

AFR 55-19, 13 July 1956, is changed as follows:

* * * *

2. Operational Control and Supervision. The Commander having jurisdiction over local flight operations will:

a. Segregate the various types of local VFR flying activities, such as instrument training, acrobatics, functional check flights, and flight tests, by designating separate areas for each type of activity. For this purpose the following definitions apply:

- (1) *Functional Check Flight*—flying an aircraft to check the operation of the aircraft and its components as required in connection with inspection and maintenance operations.
- (2) *Flight Test*—flying an aircraft for the purpose of investigating or checking the operational characteristics of a new type of aircraft or component for which the airworthiness has not been determined by appropriate authority; or flight

*This change supersedes AFR55-19A, 3 December 1956.

of production aircraft until the basic airworthiness of the aircraft and propulsion system is determined; or flights following major modification until the basic airworthiness of the aircraft has been determined.

* * * *

d. *In CONUS and Overseas:*

- (1) *Within the Continental United States and its territories and possessions*, submit requirements for flight test areas to the major air command concerned. The major air command will submit those requirements that are approved to the Air Force member of the appropriate Regional Airspace Subcommittee. (AFR 55-103 lists addresses and areas of responsibility of Air Force Members of Regional Airspace Subcommittees.) Air Force members of Regional Airspace Subcommittees will in turn submit flight test area requirements to the appropriate CAA Regional Administrator for designation or approval.
- (2) *In oversea areas*, submit requirements for flight test areas to the Major Air Command concerned. The Major Air Command will designate specific areas for conducting flight tests of aircraft over open water or sparsely populated areas having light air traffic. The major air command will coordinate with the appropriate authority having jurisdiction over the area within which the flight test operations will be conducted.

3. Control of Air Traffic Near Airfields. The commander, the pilot, and air traffic control personnel are responsible as follows:

a. The commander of an air base located in a congested area will establish VFR arrival and departure routes to minimize conflict with traffic on civil airways, at nearby airfields, and in local flying areas. When practicable, the commander of such a base should also establish higher VFR minimums within the local control zone. He will coordinate established procedures and routes with commanders of nearby airfields and other interested agencies.

b. The pilot approaching for landing will normally make initial contact with appropriate air traffic control agency at least 5 minutes flying time from the airport and give his position. In all cases, he will make contact prior to:

- (1) Entering control zone, or
- (2) Entering traffic pattern, if he is on local flight within the control zone.

c. Unless further restricted by special notices in radio facility charts, the pilot entering airport control zones, and when within 3,000 feet of ground, will operate his aircraft as follows:

- (1) *Jet aircraft*—not to exceed normal traffic pattern entry airspeed.
- (2) *Propeller-driven aircraft*—at reduced airspeed, but not to exceed 180 knots unless operational

characteristics require greater airspeed. In such case, aircraft will be flown at minimum air-speed consistent with safety.

d. Both the pilot and air traffic control personnel will restrict radio transmissions to a minimum, consistent with safe operations.

* * * *

By Order of the Secretary of the Air Force:

THOMAS D. WHITE

Chief of Staff

Official:

J. L. TARR

Colonel, USAF

Air Adjutant General

DISTRIBUTION:

S

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APPENDIX D.

*AFR 55-19/WINGSUP-1

Wing Supplement-1

TO AFR 55-19, 13 Jul 56

Headquarters

3595th Combat Crew Training Wing (Fighter)

United States Air Force

Nellis Air Force Base, Nevada

31 March 1958

Operations

Control of Local Air Force VFR Air Traffic

Air Force Regulation 55-19, 13 July 1956, is supplemented as follows:

1. See paragraph 1:

a. The local flying area is referenced to the GEOREF grid system. All grid references are prefixed with the EJ basic 15 degree quadrangle.

b. The local flying area extends from: DK0000 to KK0000 to KF0010 to JF2500 to FF3000 to DG0057 to DK0000.

c. Lake Mead Base will not be overflown and restricted areas and airspace reservations will be avoided at all times unless on a directed flight. Prohibited area P275 will not be overflown unless authorized by the AEC.

2. See paragraph 2a:

a. Instrument training may be conducted in any part of the local area, except the air combat maneuvering

*This Supplement supersedes Wing Supplement 1 dated 21 March 1958, to AFR55-19.

App. D-p. 2

area, acrobatic and test area, and gunnery ranges. The area within a 25-mile radius of Nellis Air Force Base is reserved for instrument flying.

b. Aerobatic and primary flight test area extends from FG4602 east following the Colorado River to GG5613 to HF0537 to GF1130 to FF4648 to FG4602.

c. Alternate flight test area extends from DG3740 to EG1212 to EG3211 via an arc drawn from a radius of twenty-five (25) nautical miles centered on Nellis Air Force Base to EG3423 to EG1734 to EG1740 to DG3740. This area may be used in the event of adverse weather conditions, etc., in the primary test area.

d. Transition flying area extends from FG4602 to FG5043 to GG4756 to GG5613 and west following the Colorado River to FG4602.

e. Close formation flying area extends from GG-4756 to HG0358 to HH3429 to HF4342 to HF0537 to GG4756.

f. Extended formation flying area (above 26,000 feet) extends from HH3429 to KH0057 to KG0023 to HF4342 to HH3429.

g. Air combat maneuvering area extends from DJ5004 to GJ3917 to FG1235 via an arc drawn with a radius of twenty-five (25) nautical miles centered on Nellis Air Force Base to EG4333, thence north and west along the limits of restricted area R271 to DJ5004.

h. Sonic boom area is within a radius of 10 miles of GG2510.

(1) Aircraft will approach the sonic boom area from the north at 35,000 feet or above. The dive angle will be 45 degrees or greater and recovery will be completed before reaching 20,000 feet on a heading of south.

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i. Supersonic firing will be conducted only within the Restricted Area (R271).

j. Helicopter test area is located over the grassy area from the Las Vegas Sewage Disposal Plant to point two (2) nautical miles east.

3. See paragraph 5:

a. The procedures for hooded flights during VFR conditions are:

(1) Request for radio range orientation or clearance for penetration will be made to Nellis VFR Control on Channel 15 (363.8 mc) prior to reaching a twenty-five (25) mile radius of Nellis. IFR R/T procedures will be used at all times.

(2) Nellis VFR Control will function primarily as an approach agency during VFR conditions only. VFR Control will clear aircraft for practice range orientation, assign approach and holding altitudes, establish time separation between flights, and issue clearance for radio range, ADF or DF penetration.

(3) For DF penetration and approach, contact Nellis DF on Channel 14 (305.4 mc) and request practice steer and penetration prior to reaching a radius of twenty-five (25) miles of Nellis, contact Nellis VFR Control on Channel 15 and request an altitude and clearance for letdown, or expected approach time. Return to Channel 14 and advise the DF facility. Report leaving assigned altitude to VFR Control on Channel 15, and other positions reports as required. Minimum altitude for station passage for a DF penetration is eight thousand (8,000) feet.

(4) During normal flying periods the minimum altitude over the low cone will be five thousand eight

App. D-p. 4

hundred (5,800) feet indicated, and five thousand five hundred (5,500) feet indicated over the field. Clearance to descend to published minimums must be obtained from the tower prior to reaching a point five (5) miles from the field.

(5) Maps showing the local flying area, prohibited and restricted areas will be prominently posted in all locations where aircraft are cleared for flying.

For the Commander :

/s/ MARVIN DOVENITZ
Captain, USAF
Adjutant

DISTRIBUTION :

Same as AFR 55-19

Plus: ATC

App. E-p. 1

APPENDIX E.

Headquarters

3595th Combat Crew Training Group (Fighter)

United States Air Force

Nellis Air Force Base, Nevada

15 April 1957

Training and Operations Memorandum
Number

51-8*

Practice Instrument Approaches

1. *Purpose:* To establish approach priority of instrument aircraft within the designated instrument area.

2. *References:* ATC Reg 60-10, CTAF Supplement-1, 2 and 3, and NAFB Supplement-1 and 2.

3. *Nellis VFR Control Responsibility:*

a. Nellis VFR Control will simulate the control exercised by an IFR Approach Control Agency during VFR conditions.

b. They will attempt to maintain vertical and lateral separation between flights and/or aircraft that have requested clearance from VFR control.

c. They cannot insure separation between aircraft under their control and other aircraft flying either VFR or IFR in the local area. Therefore, all pilots practicing instrument flying must have an alert observer at all times to insure clearance with other aircraft and cloud formations.

*This memorandum supersedes T&O Memo 51-8 dtd 12 October 56.

4. *Procedures:*

a. Approach Sequence Priority: Tactical flights requesting clearance for penetrations and low approach, will be given priority in sequence of approach by Nellis VFR Control. To expedite clearance the flight leaders should report to Nellis VFR Control well in advance of estimated arrival over the station.

b. Altitude Assignment: Altitudes at holding points shall be assigned in a manner that will facilitate clearing each aircraft to approach in its proper priority. Normally, the first aircraft to arrive over a holding point should be at the lowest altitude, with the following aircraft at successively higher altitudes. The aircraft at the higher altitude may be let down first if the position of the aircraft at the lower altitude is known.

c. Nellis VFR Control will control penetrations commencing at a fix at an assigned penetration altitude to a designated point or fix. They will advise the pilots concerned if a dangerous situation is known to them.

d. Aircraft making a VFR instrument approach will maintain radio contact with VFR Control.

e. All aircraft will change to Channel 3 when inbound from the procedure turn or when over the fix (ADF low approach). They will notify Nellis Tower of their position and monitor Channel 3 until they cross Nellis AFB.

5. *Responsibility:* It will be the responsibility of the Supervisor of Instrument Training and each Com-

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bat Crew Training Squadron Commander to assure compliance with the contents of this memorandum.

By Order of the Commander :

JOHN P. CHARLTON
Major, USAF
Adjutant

OFFICIAL :

/s/ JOHN P. CHARLTON
Major, USAF
Adjutant

DISTRIBUTION :

8—Hq CTAF
4—Hq 3595th CCT Wg (Ftr)
2—AB Gp
4—M&S Gp
50—3595th CCT Gp (Ftr)
4—AACCS Det
3—Det #1, Indian Spgs AFB

APPENDIX F.

The Court is respectfully referred to Part II of the Appendix to the opening brief of appellant, United Air Lines, Inc., in which the record references to the pleadings showing the existence of jurisdiction in the various cases is detailed; the Government in this Appendix will here supplement United's appendix by designating the record references to the pleadings necessary to show the existence of the jurisdiction in each case as indicated. All record references are to the particular Clerk's file, specified by number and name.

Number—18510; Name—Wiener

Answer and Cross-Claim of Government, R. 41; Answer of United to Cross-Claim, R. (Wiener) 1264; Notices of Appeal by the Government, R. 2638.

Number—18511; Name—Emanuel

Answer and Cross-Claim of Government, R. 49; Answer of United to Cross-Claim, R. (Wiener) 1264; Notices of Appeal by the Government, 648.

Number—18522; Name—Larava

Answer and Cross-Claim of Government, R. 20; Answer of United to Cross-Claim, R. (Wiener) 1264; Notices of Appeal by the Government, 632.

Number—18533; Name—Simmons

Answer and Cross-Claim of Government, R. 17; Answer of United to Cross-Claim, R. (Wiener) 1264; Notices of Appeal by the Government, 704.

Number—18514; Name—Kean

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Number—18515; Name—McKinney

Answer and Cross-Claim of Government, R. 19; An-
swer of United to Cross-Claim, R. (Wiener) 1264;
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Number—18516; Name—Petrie

Answer and Cross-Claim of Government, R. 20; An-
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Number—18517; Name—Kaufman

Answer and Cross-Claim of Government, R. 22; An-
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Number—18518; Name—Fedrick

Answer and Cross-Claim of Government, R. 38; An-
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Number—18519; Name—Lipson

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swer of United to Cross-Claim, R. (Wiener) 1264;
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Number—18521; Name—Rankin

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Number—18522; Name—Kallenbaugh

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Number—18523; Name—Thomas

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Number—18524; Name—Aaronson

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Number—18525; Name—Weil

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Number—18526; Name—Trujillo

Answer and Cross-Claim of Government, R. 18; Answer of United to Cross-Claim, R. (Wiener) 1264; Notices of Appeal by the Government, 542.

Number—18527; Name—Friedel

Answer and Cross-Claim of Government, R. 51; Answer of United to Cross-Claim, R. (Wiener) 1264; Notices of Appeal by the Government, 653.

Number—18528; Name—Bailey

Answer and Cross-Claim of Government, R. 37; Answer of United to Cross-Claim, R. (Wiener) 1264; Notices of Appeal by the Government, 637.

Number—18529; Name—Rachford

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Number—18530; Name—Munch

Answer and Cross-Claim of Government, R. 19; Answer of United to Cross-Claim, R. (Wiener) 1264; Notices of Appeal by the Government, 636.

Number—18531; Name—Hight

Answer and Cross-Claim of Government, R. 18; Answer of United to Cross-Claim, R. (Wiener) 1264; Notices of Appeal by the Government, 627.

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